

Title (en)
TURBINE ENGINE VANE WITH FLUID COOLED SHROUD

Title (de)
STRÖMUNGSMASCHINENSCHAUFEL MIT FLUIDISCH GEKÜHLTEM DECKBAND

Title (fr)
PALE DE TURBOMACHINE A COURONNE A REFROIDISSEMENT FLUIDIQUE

Publication
EP 1789654 B1 20170823 (DE)

Application
EP 05796951 A 20050908

Priority
• EP 2005054448 W 20050908
• CH 15252004 A 20040916

Abstract (en)
[origin: WO2006029983A1] A turbine engine vane (10) for a gas turbine is disclosed. The turbine engine vane (10), comprises a vane root (11) with a fluid coolant inlet (12), a vane head (13), embodied with a shroud element (14) and a vane blade (15). At least one through channel (19a) is arranged within the vane blade (15), running in the vane longitudinal direction. A shroud cooling channel (22) is embodied in the shroud element over at least a section of the shroud element (14), connected to the through channel (19a) by an opening (23, 24) through which a cooling fluid flows during operation of the turbine engine vane. At least one flow guide element (30, 31 -d1 - 31-d11, 31 -s1 - 31-s12, 32) is arranged in the shroud cooling channel and/or in a inlet or outlet to the shroud cooling channel for guiding at least a part of the cooling fluid flow through the shroud cooling channel.

IPC 8 full level
F01D 5/18 (2006.01); **F01D 5/22** (2006.01)

CPC (source: EP US)
F01D 5/187 (2013.01 - EP US); **F01D 5/225** (2013.01 - EP US); **F05D 2240/126** (2013.01 - EP US); **F05D 2240/81** (2013.01 - EP US); **F05D 2260/2212** (2013.01 - EP US); **F05D 2260/22141** (2013.01 - EP US); **Y02T 50/60** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2006029983 A1 20060323; AU 2005284134 A1 20060323; AU 2005284134 B2 20081009; EP 1789654 A1 20070530; EP 1789654 B1 20170823; MY 139148 A 20090828; US 2007154312 A1 20070705; US 7427188 B2 20080923

DOCDB simple family (application)
EP 2005054448 W 20050908; AU 2005284134 A 20050908; EP 05796951 A 20050908; MY PI20054292 A 20050913; US 68593007 A 20070314